

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

October 20, 2010

Martin Mucci, President and Chief Executive Officer Paychex, Inc. 911 Panorama Trail South Rochester, New York 14625-2396

Re: Paychex, Inc.

Form 10-K for the Fiscal Year Ended May 31, 2010

Definitive Proxy Statement on Schedule 14A

File No. 000-11330

Dear Mr. Mucci:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year End May 31, 2010

Exhibits 31.1 and Exhibit 31.2

1. We note that you omitted or changed language in paragraphs 4(d) and 5 of the officer certifications. In future filings, please use the exact language in the certification presented in Item 601(b)(31) of Regulation S-K. Please also comply with this comment with respect to the certifications filed with your quarterly reports.

Definitive Proxy Statement on Schedule 14A

Nomination process, page 22

2. We note your statement in the second sentence of the first paragraph of this section. In future filings, please disclose whether you consider diversity in evaluating candidates for nomination to the board. If the committee has a policy with regard to the consideration

Mr. Martin Mucci Paychex, Inc. October 20, 2010 Page 2

of diversity in identifying director nominees, describe how this policy is implemented, as well as how the nominating committee assesses the effectiveness of its policy. Please refer to Item 407(c)(2)(vi) of Regulation S-K.

Compensation Discussion and Analysis, page 24

Elements of Compensation, page 26

3. We note your disclosure in the last paragraph on page 26. In future filings, please disclose your named executive officers' total compensation in comparison to that of the Peer Group for the last completed fiscal year (i.e. below, at or above the median total compensation of the Peer Group). See Item 402(b)(2)(xiv) of Regulation S-K.

Annual Officer Performance Incentive Program, page 27

- 4. In future filings, please define "annualized new business revenue" and describe how the number is calculated from your audited financial statements. Please refer to Instruction 5 of Item 402(b) of Regulation S-K.
- 5. You indicate in the last paragraph on page 27 that the committee establishes the targets for payout. In future filings, please disclose if the committee assigns a particular weighting to each performance target (such as those in the chart on page 24) in your determination of the quantitative payouts for each NEO. See Item 402(b)(2)(vi) of Regulation S-K.
- 6. We note your disclosure in the last paragraph of this section on page 28 regarding the qualitative goals under the annual incentive program. Please disclose whether the committee exercised its discretion to award the qualitative component for each named executive officer.

Equity-Based Compensation, page 28

7. In future filings, please disclose whether the committee exercised its discretion to adjust the stock awards granted in July 2009. When the committee exercises such discretion, please disclose the individual performance and/or other factors considered in adjusting the award. See Item 402(b)(2)(vi) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Mr. Martin Mucci Paychex, Inc. October 20, 2010 Page 3

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Chambre Malone, Staff Attorney at (202) 551-3262 or, in her absence, Craig Slivka, Special Counsel at (202) 551-3729 if you have questions regarding the comments.

Sincerely,

Pamela Long Assistant Director